

Appl. No. 10/711,794
Amdt. dated May 26, 2006
Reply to Office action of January 27, 2006

Amendments to the Drawings:

The attached sheet of drawing includes an addition Fig. 8. As requested by the examiner, Fig. 8 is added to illustrate a package structure having a semiconductor device that is solder bonded to a set of leads that contain a recession, a passive device that is also
5 bonded to a second set of leads which also contain recessions, and a die pad electrically connected to ground and to the semiconductor device.

Attachment: New Sheet

1 page

10

11

Appl. No. 10/711,794
Amdt. dated May 26, 2006
Reply to Office action of January 27, 2006

REMARKS/ARGUMENTS

Regarding amendments to the specification:

The specification is amended to overcome the objections set forth on the following detailed Office action, emphasize the characteristics of the claimed invention, and in the interests of clarity is reproduced above in toto. (Amendments are indicated in the standard way and the original page/line formatting has been retained as far as practicably possible.)
No new matter is entered by the above amendments.

Regarding amendments to the claims:

Claims 1-16 are amended to overcome the objections set forth on the following detailed Office action, emphasize the characteristics of the claimed invention, and in the interests of clarity is reproduced above in toto. Hence, no new matter is entered by the above amendments.

Regarding rejections under 35 U.S.C. 102 and 35 U.S.C. 103: Examiner:

1. Claims 1, 2, 13, 15, & 16 are rejected under 35 U.S.C 102(b) as being anticipated by Merrin et al (US Pat. 3436818).

Claims 1-16 are amended to overcome the above rejections, as the examiner has suggested that claims 3, 4 and 9 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The currently amended claims 1-12 should therefore be allowable. Reconsideration of the amended claims 1-12 is politely requested.

According to claim 13 of the claimed invention, the package structure includes a lead frame having a plurality of leads, in which at least two of the leads comprises a recession; at least a passive device, in which each output of the passive device is

Appl. No. 10/711,794
Amdt. dated May 26, 2006
Reply to Office action of January 27, 2006

respectively positioned in the recession; and a plurality of solder joints respectively positioned in the recessions for connecting the passive device to the lead frame.

In contrast to the claimed invention, Merrin et al only suggests a substrate having a conductive pattern formed thereon, in which the conductive pattern may be utilized for
5 connecting to an active or passive device. Nevertheless, Merrin et al never suggests a lead frame structure having a plurality of leads, in which the leads further includes a plurality of recessions and solder joints disposed in the recessions for connecting to a passive device.

According to Chapter 2112 in the MPEP, in relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the
10 determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. Since the inherency of a package structure having a lead frame and a plurality of leads does not flow from the teachings of Merrin et al, the original claims 13-16 should be novel based on the above analysis. Reconsideration of the original claims 13-16 is politely requested.

15

2. Claims 13-16 are rejected under 35 U.S.C 103(a) as being unpatentable over Terui et al (US Pat. 6608375) in view of Merrin et al (US Pat. 3436818).

According to claim 13 of the claimed invention, the package structure includes a lead frame having a plurality of leads, in which at least two of the leads comprises a
20 recession; at least a passive device, in which each output of the passive device is respectively positioned in the recession; and a plurality of solder joints respectively positioned in the recessions for connecting the passive device to the lead frame.

In contrast to the claimed invention, Merrin et al only suggests a substrate having a conductive pattern formed thereon, in which the conductive pattern may be utilized for
25 connecting to an active or passive device. Nevertheless, Merrin et al never suggests a lead frame structure having a plurality of leads, in which the leads further includes a plurality of recessions and solder joints disposed in the recessions for connecting to a passive device.

Appl. No. 10/711,794
Amdt. dated May 26, 2006
Reply to Office action of January 27, 2006

Despite the fact that Terui have disclosed a structure of having a lead frame, a plurality of leads, and a plurality of solder joints for connecting a passive device to the lead frame, Terui fails to teach a plurality of recessions formed in the leads, as disclosed in the claimed invention. Since the lead frame structure disclosed by Terui et al is
5 significantly different from the one taught by Merrin et al, those skilled in the art would find it physically impossible to combine the references in the manner suggested.

3. Claims 1, 2, 10 & 12 are rejected under 35 U.S.C 103(a) as being unpatentable over Lo et al (US Pat. 6507120) in view of Merrin et al (US Pat. 3436818).

10 Claims 1-16 are amended to overcome the above rejections, as the examiner has suggested that claim 3, 4 and 9 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The currently amended claims 1-12 should therefore be allowable. Reconsideration of the amended claims 1-12 is politely requested.

15

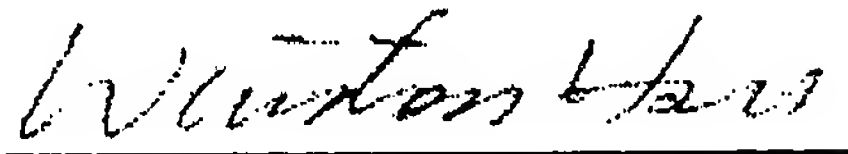
4. Claims 1, 2, 10 & 12 are rejected under 35 U.S.C 103(a) as being unpatentable over Park et al (US Pat. 6984878) in view of Merrin et al (US Pat. 3436818).

20 Claims 1-16 are amended to overcome the above rejections, as the examiner has suggested that claim 3, 4 and 9 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The currently amended claims 1-12 should therefore be allowable. Reconsideration of the amended claims 1-12 is politely requested.

25 Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Appl. No. 10/711,794
Amndt. dated May 26, 2006
Reply to Office action of January 27, 2006

Sincerely yours,



Date: 05/26/2006

Winston Hsu, Patent Agent No. 41,526

5 P.O. BOX 506, Merrifield, VA 22116, U.S.A.

Voice Mail: 302-729-1562

Facsimile: 806-498-6673

e-mail : winstonhsu@naipo.com

- 10 Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.)